

# BLOCK CHAIN IN FAKE PRODUCT IDENTIFICATION SYSTEM USING QRCODE

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## ABSTRACT

*Every popular brand has fake manufacturers selling a counterfeited item at cheaper rates. Mostly counterfeiting medicine are selling to customer. For these factors combined with block chain technology can lead to an efficient comprehensive approach to reduce counterfeiting. Pharmaceutical organizations face many challenges regarding counterfeit medicines. Detecting fault medicines so that it will save public life. To discover the consciousness of the fake medication issue which requires an expanding security level for the appropriation of lawful pharmaceutical items. Manufacturing to user can be recorded, and the user is assured that the scans weren't faked. The fake products can be identified by using QR code and it handles the product data*

## KEYWORDS

*component, formatting, style, styling, insert (key words)*

## 1. INTRODUCTION

This Medicine counterfeiting is a serious worldwide issue, involving networks of manufacture and distribution that are an integral part of industrialized organized crime. Using a block chain technology this medicine information will be secured. If at any stage counterfeit medicine is introduced into the system, it will be detected immediately, and its further penetration will be stopped. This paper aims to address the issue of drug safety using block chain and encrypted QR (quick response) code security. Results show that the system thus formed is computationally intensive but offers a reliable solution to the menace of fake medicines

## 2. PROBLEM STATEMENT

The growth in medical industry is immense but also it has been developed in production of counterfeit drugs. The market cost of pharmaceutical counterfeiting has reached billions of dollars annually. In most existing the fake medicines have been found using Bar codes by alphanumeric. Bar codes can be scanned in a line. In order to have a good medical industry, need to prevent from fake drugs. The objective of the system is to identify the counterfeit drugs. This can be accomplished by adding up data about the medicine into its QR code

- **Architectural Diagram**

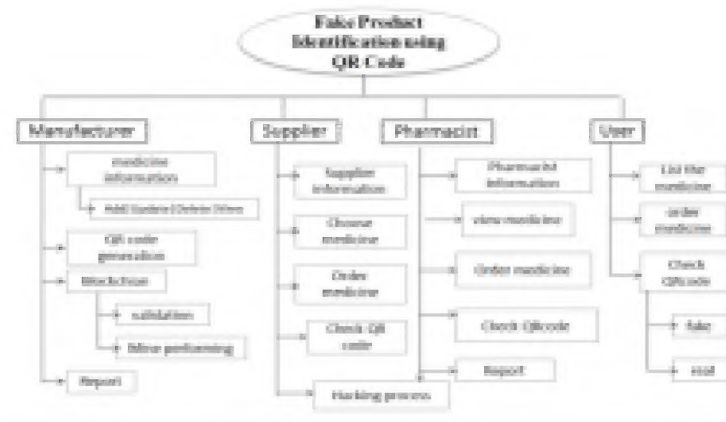


Figure-1 Architecture Diagram

### 3. EXPERIMENTS AND RESULTS

#### Module

##### A. Manufacturer

Manufacturer will register and login to the system by using valid credentials. Then manufacturer can add the products in its database. They also generate the QR code in the products.

##### B. Supplier

Supplier will register and login to the system by using valid username and password. Supplier will view the product list and if want they can place the order of that drugs by scanning the QR code

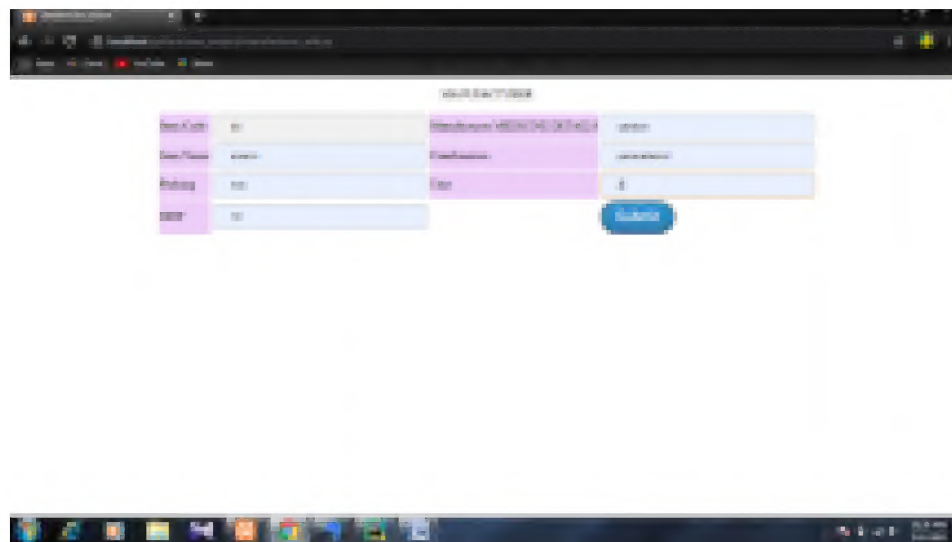
##### C. Pharmacist

Pharmacist will also register and login to the system with valid credentials. Pharmacist view the patients request and also view the available products list and if want then they can place the order of that drugs by scanning the QR code

##### D. User

User will register and login to the system using valid username and password. User place its order buy the drugs and at last logout from the system.

## OUTPUT SCREEN



CREATE MEDICINE

Name	Brand	Price	Quantity

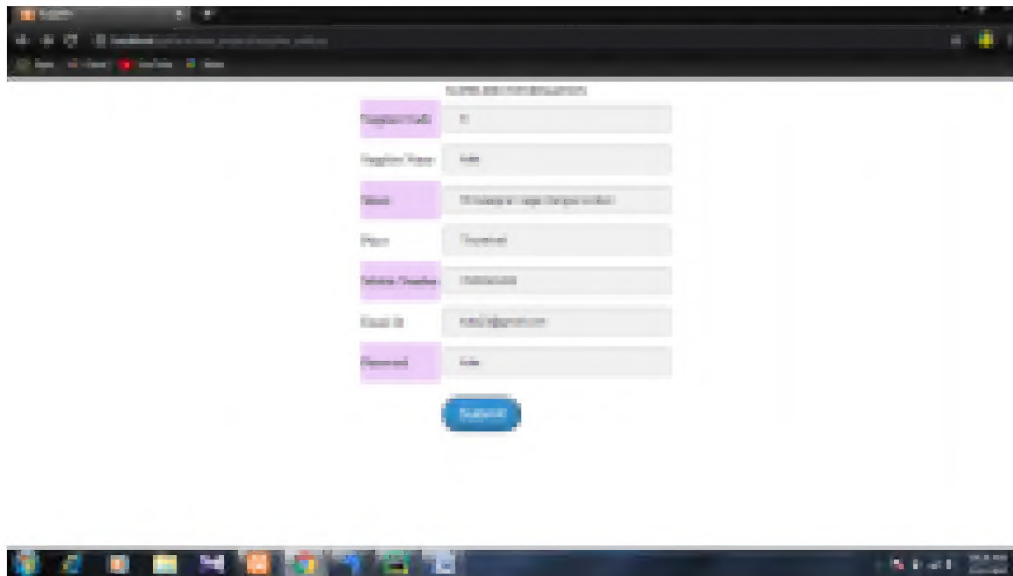
Submit

Figure- 2 Create Medicine



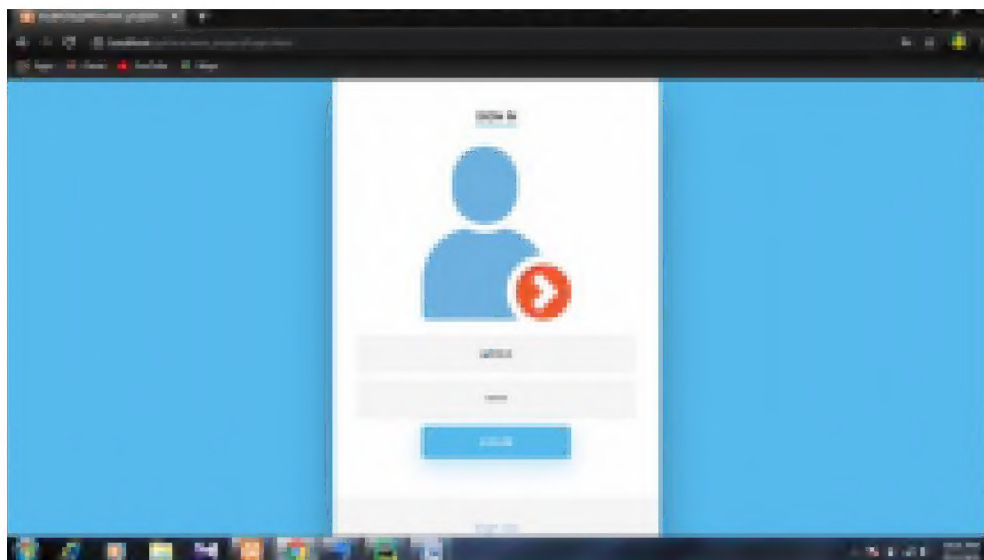
Name	Brand	Price	Quantity	QR Code
ASPIRIN	ASPIRIN	100	100	
IBUPROFEN	IBUPROFEN	100	100	
PARACETAMOL	PARACETAMOL	100	100	
VITAMIN C	VITAMIN C	100	100	
...	...	...	...	...

Figure-3 Manage Medicine



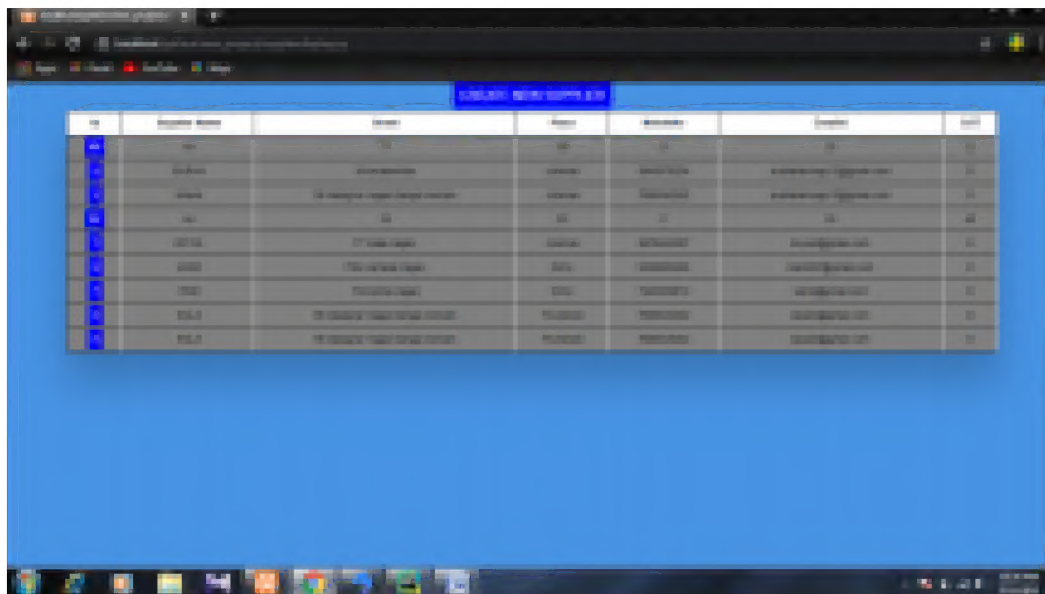
The screenshot shows a web browser window displaying a form titled "Add Supplier". The form is centered on a light gray background. It contains several input fields with labels on the left and a "Save" button at the bottom. The labels and their corresponding values are: "Supplier Name" (B), "Supplier Phone" (1234567890), "Address" (123 Main Street, Springfield, IL 62761), "Email" (info@supplier.com), "Website" (http://www.supplier.com), "Contact Person" (John Doe), "Contact Email" (john.doe@supplier.com), and "Contact Phone" (1234567890). The "Save" button is blue with white text.

Figure-4 Adding Supplier



The screenshot shows a web browser window displaying the "Admin Login" page. The page has a blue header and a white body. In the center, there is a blue silhouette of a person with a red circular icon containing a white right-pointing arrow. Below the icon, there are two input fields labeled "Username" and "Password". At the bottom, there is a blue "Login" button. The page is flanked by two large blue vertical bars.

Figure-5 Admin Login



The screenshot shows a web application window titled "Manage Supplier". The interface has a blue header bar with the text "Manage Supplier" and a search bar. Below the header is a table with the following columns: ID, Supplier Name, Address, Phone, Email, and Status. The table contains 10 rows of data. The first row is highlighted in blue. The table is displayed on a blue background.

ID	Supplier Name	Address	Phone	Email	Status
1	ABC	123 Main St	123-456-7890	abc@abc.com	Active
2	DEF	456 Main St	456-789-0123	def@def.com	Active
3	GHI	789 Main St	789-012-3456	ghi@ghi.com	Active
4	JKL	101 Main St	101-234-5678	jkl@jkl.com	Active
5	MNO	202 Main St	202-345-6789	mno@mno.com	Active
6	PQR	303 Main St	303-456-7890	pqr@pqr.com	Active
7	STU	404 Main St	404-567-8901	stu@stu.com	Active
8	VWX	505 Main St	505-678-9012	vwx@vwx.com	Active
9	YZA	606 Main St	606-789-0123	yz@yz.com	Active
10	BCD	707 Main St	707-890-1234	bcd@bcd.com	Active

Figure-6 Manage Supplier

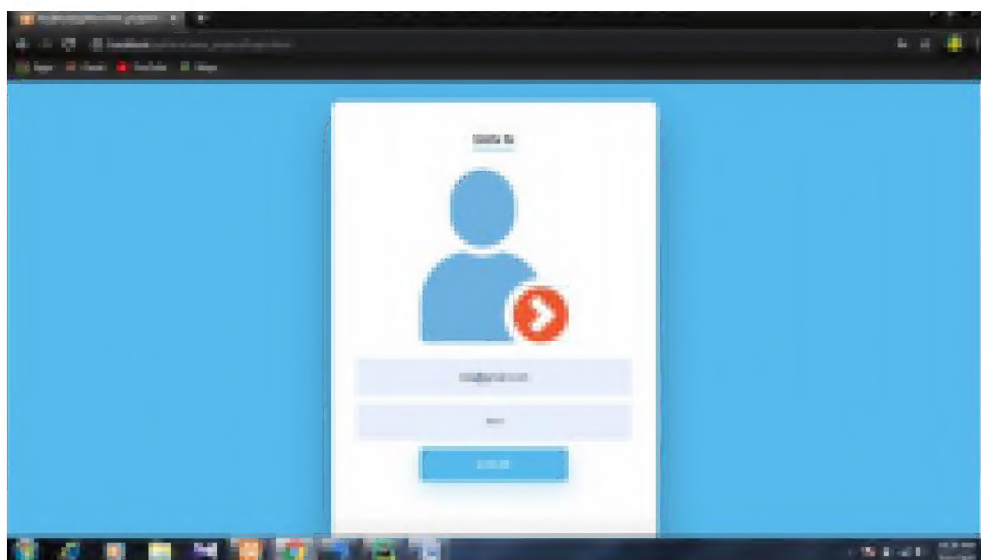


Figure-7 User Login

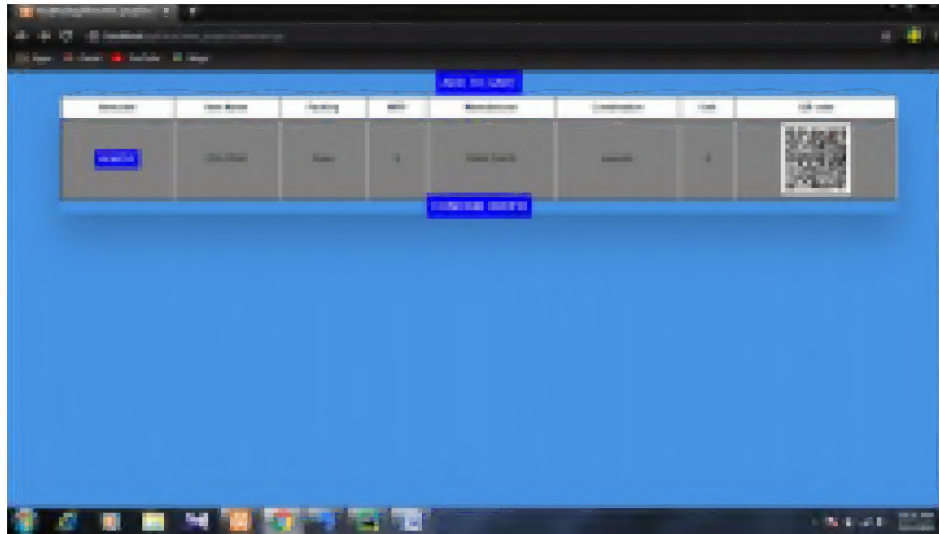


Figure-8 Order

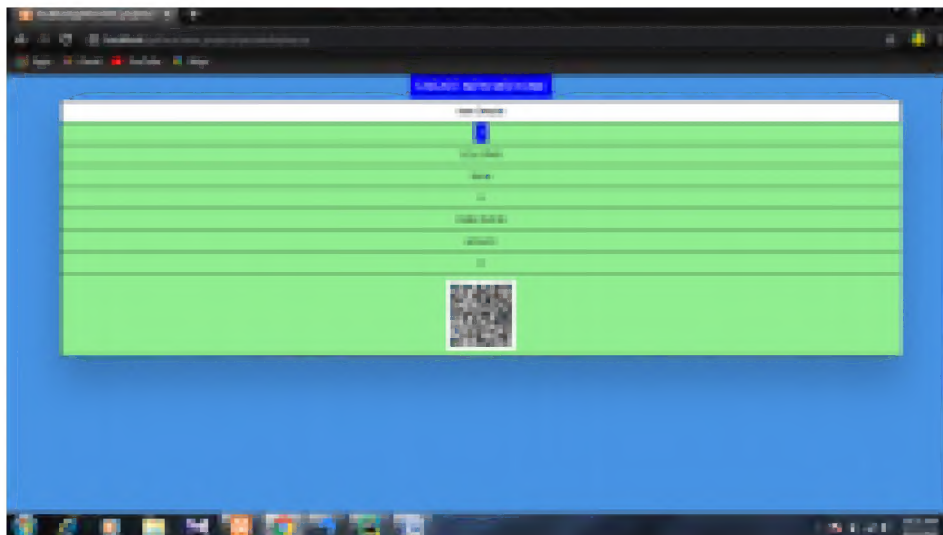


Figure-9 Check QRcode

## PERFORMANCE ANALYSIS

The existing and proposed system are analysed. . The problem identified existing is system is the growth in medical industry is immense but also it has been developed in production of counterfeit drugs and proposed system gadget may be used in pharmaceutical industry to track the tablets from its manufacturing until its delivery to patient. Nearly 70% performance has been increased.

## 4. CONCLUSION

The Fake product identification system is developed using python and My SQL. This web application provides awareness of counterfeit drugs to the user. QRcode are used to identify the fake product. Manufacturer will generate a QRcode for each product. Then through the web site the user can buy the medicine using QRcode. If the medicine is fake it will generate a fake identification.

## 5.FUTURE ENHANCEMENT

In future we implement this in android application. Manufacturer can identify the location while the customer who check the QRcode that the result is fake. If the user result.

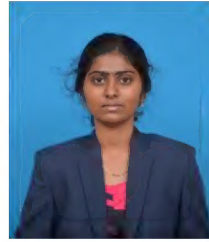
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